



RAW SEQUENCE LISTING **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/900,063A
Source: 1600
Date Processed by STIC: 6/12/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003

RECEIVED
JUN 19 2003
TECH CENTER 1800/210



1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/900,063A

DATE: 06/12/2003

TIME: 08:07:21

Input Set : A:\EP.txt

Output Set: N:\CRF4\06122003\I900063A.raw

5 <110> APPLICANT: Rothschild, Max F.

7 Vincent, Amy L.

9 Tuggle, Christopher K.

13 <120> TITLE OF INVENTION: PROLACTIN RECEPTOR GENE AS A GENETIC MARKER FOR INCREASED LITTER SIZE IN

14 ANIMALS

18 <130> FILE REFERENCE: P02285UD5

22 <140> CURRENT APPLICATION NUMBER: US 09/900,063A

24 <141> CURRENT FILING DATE: 2001-07-06

28 <150> PRIOR APPLICATION NUMBER: US 08/812,208

30 <151> PRIOR FILING DATE: 1997-03-06

34 <150> PRIOR APPLICATION NUMBER: US 08/742,805

36 <151> PRIOR FILING DATE: 1996-11-01

40 <150> PRIOR APPLICATION NUMBER: US 60/022,180

42 <151> PRIOR FILING DATE: 1996-07-19

46 <160> NUMBER OF SEQ ID NOS: 18

50 <170> SOFTWARE: PatentIn version 3.1

54 <210> SEQ ID NO: 1

56 <211> LENGTH: 20

58 <212> TYPE: DNA

60 <213> ORGANISM: Porcine

64 <400> SEQUENCE: 1

65 cccaaaacag caggagaacg

68 <210> SEQ ID NO: 2

70 <211> LENGTH: 20

72 <212> TYPE: DNA

74 <213> ORGANISM: Porcine

78 <400> SEQUENCE: 2

79 ggcaagtggg tgaaaatgga

82 <210> SEQ ID NO: 3

84 <211> LENGTH: 492

86 <212> TYPE: DNA

88 <213> ORGANISM: Porcine

92 <220> FEATURE:

94 <221> NAME/KEY: allele

96 <222> LOCATION: (240)..(240)

98 <223> OTHER INFORMATION: G/A polymorphic site

102 <400> SEQUENCE: 3

103 aagtcaacaa agatggagca ctggcggttgc tcccaaaaca gcaggagaaac ggcgaccggc 60

105 cggagaaggc tggcgccctt gaaaccagca aggaatacgc ccagggtgtcc cgggtgatgg 120

107 ataaccacat cctggtgtta gtgcaggatc cgcgagctcg aaacgtggct ccggttgaag 180

109 aaccaaccaa ggagaccccg ccattccggc cgcagaatcc agctgcgaaa gacctggcgg 240

111 gcttcaccac ggcccccggc cactgcagac acccgctggg tgggctggat tacctcgatc 300

113 ccgcaggctt tatgcactcc ttccagtgc agcttggttc atgggatgat gggttacaag 360

Does Not Comply
Corrected Diskette Needed

pp 1-4

per Sequence Rules, use "r"
r = a or g

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Input Set : A:\EP.txt

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```

115 gtgggggtttt ttccaggteg cactacgtga aatgcactct accagagaaa gtcgaaaat 420
117 ggggttagaa tgacactacc cagactcaca gtctactcct ctccatgctc cattttcaac 480
119 cacttgccctc tt 492
122 <210> SEQ ID NO: 4
124 <211> LENGTH: 20
126 <212> TYPE: DNA
128 <213> ORGANISM: Unknown
132 <220> FEATURE:
134 <223> OTHER INFORMATION: Human and rabbit cDNA sequences encoding the prolactin
receptor
135 were used to design the degenerate primer
137 <220> FEATURE:
139 <221> NAME/KEY: misc_difference
141 <222> LOCATION: (13)..(13)
143 <223> OTHER INFORMATION: C/T use "y" y = cor +
147 <400> SEQUENCE: 4
148 tcacaaggtc aaagaagatg 20
151 <210> SEQ ID NO: 5
153 <211> LENGTH: 20
155 <212> TYPE: DNA
157 <213> ORGANISM: Unknown
161 <220> FEATURE:
163 <223> OTHER INFORMATION: Human and rabbit cDNA sequences encoding the prolactin
receptor
164 were used to design the degenerate primer
166 <220> FEATURE:
168 <221> NAME/KEY: misc_difference
170 <222> LOCATION: (3)..(3)
172 <223> OTHER INFORMATION: G/A use "r"
176 <220> FEATURE:
178 <221> NAME/KEY: misc_difference
180 <222> LOCATION: (9)..(9)
182 <223> OTHER INFORMATION: G/A use "r"
186 <220> FEATURE:
188 <221> NAME/KEY: misc_difference
190 <222> LOCATION: (16)..(16)
192 <223> OTHER INFORMATION: G/A use "r"
196 <400> SEQUENCE: 5
197 tggagaaaga ggcaagtgg 20
200 <210> SEQ ID NO: 6
202 <211> LENGTH: 20
204 <212> TYPE: DNA
206 <213> ORGANISM: Porcine
210 <400> SEQUENCE: 6
211 cggcgcgaga atcctgctgc 20
214 <210> SEQ ID NO: 7
216 <211> LENGTH: 24
218 <212> TYPE: DNA
220 <213> ORGANISM: Porcine
224 <400> SEQUENCE: 7
225 accccacctt gtaaccatc atcc 24

```

RAW SEQUENCE LISTING

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TIME: 08:07:21

Input Set : A:\EP.txt

Output Set: N:\CRF4\06122003\I900063A.raw

```

228 <210> SEQ ID NO: 8
230 <211> LENGTH: 18
232 <212> TYPE: DNA
234 <213> ORGANISM: Porcine
238 <400> SEQUENCE: 8
239 caaggtggga acatgagt 18
242 <210> SEQ ID NO: 9
244 <211> LENGTH: 20
246 <212> TYPE: DNA
248 <213> ORGANISM: Porcine
252 <400> SEQUENCE: 9
253 aatcctttta tttttggccc 20
256 <210> SEQ ID NO: 10
258 <211> LENGTH: 20
260 <212> TYPE: DNA
262 <213> ORGANISM: Porcine
266 <400> SEQUENCE: 10
267 gattattgtc tgggcagtgg 20
270 <210> SEQ ID NO: 11
272 <211> LENGTH: 20
274 <212> TYPE: DNA
276 <213> ORGANISM: Porcine
280 <400> SEQUENCE: 11
281 aatcctttta tttttggccc 20
284 <210> SEQ ID NO: 12
286 <211> LENGTH: 20
288 <212> TYPE: DNA
290 <213> ORGANISM: Porcine
294 <400> SEQUENCE: 12
295 gattattgtc tgggcagtgg 20
298 <210> SEQ ID NO: 13
300 <211> LENGTH: 23
302 <212> TYPE: DNA
304 <213> ORGANISM: Porcine
308 <400> SEQUENCE: 13
309 ctatttcaca aaaactgcgc tac 23
312 <210> SEQ ID NO: 14
314 <211> LENGTH: 566
316 <212> TYPE: DNA
318 <213> ORGANISM: Porcine
322 <220> FEATURE:
324 <221> NAME/KEY: misc feature
326 <222> LOCATION: (36)..(36)
328 <223> OTHER INFORMATION: n = unknown at amino acid position 36
332 <400> SEQUENCE: 14
W--> 333 gattattgtc tgggcagtgg tottctctgt ctatcnaccc cctccatt catggtctc 60
335 aggtataat ggccaaaaaa aagacaagac aaaaatgatg gaaacctaca gataattyaa 120
337 gcacctcatt ttgccattag ctgcattagc cataaaaaaa aaaaaaaaaa cttttctca 180
339 gtgctagaaa aaacagaat agactcattt gaaactgatc ttctctctac caaaggagat 240

```

? This is a nucleotide sequence.

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Input Set : A:\EP.txt

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```

341 agcgaggttg tgaatagta aacgtctgac aagaacagca aataatccca ctagtaattt 300
343 cagaatecgc ctctcaatt agccagaatt cactgtgatg ctggcctcta taattattat 360
345 ttgtcttcac cactgattag ttccacatca tgaaaattgc atgtcattta gtttcacrt 420
347 gcoctagaac caaccctaatt tctacotgc catatcoctg tagcagctat tcgaagatca 480
349 caaggtggga acatgtgtya tttatctttt ctcttacatt attttagagc atggtggcct 540
351 gcatcogggc caaaaataaa aggatt 566

```

354 <210> SEQ ID NO: 15

356 <211> LENGTH: 518

358 <212> TYPE: DNA

360 <213> ORGANISM: Porcine

364 <220> FEATURE:

366 <221> NAME/KEY: misc_feature

368 <222> LOCATION: (49)..(49)

370 <223> OTHER INFORMATION: n = unknown in amino acid position 49

374 <220> FEATURE:

376 <221> NAME/KEY: misc_feature

378 <222> LOCATION: (67)..(67)

380 <223> OTHER INFORMATION: n = unknown in amino acid position 67

384 <400> SEQUENCE: 15

W--> 385 gtacacacac acacacacac acacacacac acacacacac gtttaagcttt atttttgaat 60

```

387 catgcacacc cgagggccac ccataagagga gtgtggtgga ggggtgccttg gcaatttctga 120
389 gccctgcac cctacaccca ctaggctcaa gatgtcatcc ctgccctggc ccccacccat 180
391 ctgctttctgt caccagcaga atggtccagt cattgagcgg accttcatat tgaotccagt 240
393 ggctttctggc tttttctagg acagtcacct ccgggaaaac ctgagatctt caaatgtcgt 300
395 totcccgaaa aggaaacatt cgctgctgg tggaagccgg gggcgatgg aggacttcc 360
397 accaactaga cgtgactta ccacaaggaa gggttaagcat togcgtgtct cccaacaaac 420
399 caacagagtgt ttctctctct gtgggccaga ggaacactgc ttctgggtta gaactgcctc 480
401 gctttggagt tccgctcatg gctcagtgg aaogaatc 518

```

404 <210> SEQ ID NO: 16

406 <211> LENGTH: 133

408 <212> TYPE: DNA

410 <213> ORGANISM: Homo sapiens

414 <400> SEQUENCE: 16

```

415 gacagttacc tcttgaaaaa cctgagatct ttaaatgtcg ttctcccaat aaggaaacat 60
417 tcacctgctg gtggaggcct gggacagatg gaggacttcc taccaattat tcaactgactt 120
419 accacaggga agg 133

```

422 <210> SEQ ID NO: 17

424 <211> LENGTH: 53

426 <212> TYPE: PRT

428 <213> ORGANISM: Homo sapiens

432 <400> SEQUENCE: 17

```

434 Gly Gln Leu Pro Pro Gly Lys Pro Glu Ile Phe Lys Ser Pro Phe Cys
435 1 5 10 15
438 Arg Ser Pro Asn Lys Glu Thr Phe Thr Glu Ala Arg Pro Gly Thr Asp
439 20 25 30
442 Gly Gly Leu Pro Thr Asn Lys Pro Ala Asn Tyr Ser Leu Thr Tyr His
443 35 40 45
446 Arg Glu Gly Thr Lys
447 50

```

*This is a
nucleotide
sequence*

RAW SEQUENCE LISTING

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TIME: 08:07:21

Input Set : A:\EP.txt

Output Set: N:\CRF4\06122003\I900063A.raw

450 <210> SEQ ID NO: 18
452 <211> LENGTH: 132
454 <212> TYPE: DNA
456 <213> ORGANISM: Porcine
460 <400> SEQUENCE: 18
461 acagtcacct ccgggaaaac ctgagatctt caaatgtcgt tctcccgaaa aggaaacatt 60
463 cgctgctgg tggaagccgg gggcggatgg aggacttctt accaactaga cgctgactta 120
465 ccacaaggaa gg 132

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 06/12/2003
PATENT APPLICATION: US/09/900,063A TIME: 08:07:22

Input Set : A:\EP.txt
Output Set: N:\CRF4\06122003\I900063A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:14; N Pos. 36
Seq#:15; N Pos. 49,67

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 13

VERIFICATION SUMMARY

DATE: 06/12/2003

PATENT APPLICATION: US/09/900,063A

TIME: 08:07:22

Input Set : A:\EP.txt

Output Set: N:\CRF4\06122003\I900063A.raw

L:333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
M:341 Repeated in SeqNo=15

STATISTICS SUMMARY

DATE: 06/12/2003

PATENT APPLICATION: US/09/900,063A

TIME: 08:07:22

Input Set : A:\EP.txt

Output Set: N:\CRF4\06122003\I900063A.raw

Application Serial Number: US/09/900,063A

Alpha or Numeric or Xml: Numeric

Application Class:

Application File Date: 07-06-2001

Art Unit: 1600

Software Application: PatentIN3.1

Total Number of Sequences: 18

Total Nucleotides: 2086

Total Amino Acids: 53

Number of Errors: 0

Number of Warnings: 3

Number of Corrections: 0

MESSAGE SUMMARY

341 W: 3 ((46) "n" or "Xaa" used)